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## A comparison of paracetamol, ibuprofen or diclofenac potassium for pain relief following dental extractions: A randomized controlled trial

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**Objective:** To compare the effectiveness of different oral analgesics for relieving pain and distress in adults following the extraction of teeth under local anaesthesia. The analgesics included paracetamol, ibuprofen and diclofenac potassium.

**Methods:** This randomized controlled study was conducted from 10<sup>th</sup> of November 2015 until 10<sup>th</sup> of May 2016. 120 patients were randomly allocated to one of three groups. Forty patients were in the paracetamol (1000 mg) group (control group), 40 in the ibuprofen (400 mg) group and 40 in the diclofenac potassium (50 mg) group. Evaluation of the post extraction pain was made by patients immediately postoperatively, 2, 4 and 6 hours postoperatively on standard 100 mm visual analogue scales (VAS), tagged at the endpoints with “no pain” (0 mm) and “unbearable pain” (100 mm). Furthermore, each patient was observed preoperatively and immediately postoperatively for signs of distress by using a 5-point face scale.

**Results:** There were significant decreases in mean pain scores for diclofenac potassium group compared to paracetamol and ibuprofen groups at 4 and 6 hours postoperatively (P-values from one-way ANOVA: 0.00, 0.001, 0.04, 0.005). Changes in distress scores from the preoperative score to the post-operative score were made using the paired sample t-test. There were significant decreases in distress scores between the pre-operative and post-operative scores (P=0.001).

**Conclusions:** This study has shown that diclofenac potassium was more effective than paracetamol or ibuprofen for postoperative analgesia in adults who are having teeth extracted under local anaesthesia.

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